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EXAMINER

KELLY, RAFFERTY D

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,326	Applicant(s) VANDYCK ET AL.	
	Examiner RAFFERTY KELLY	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9, 12, 17, 18, 20-37, and 41-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 12, 17, 18, 20-37, and 41-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Amendment filed on 12/31/2007 is acknowledged and has been entered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 8, 9, 17, 23-26, 29, 33, 34, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (WO 96/34367).

With respect to claim 1, Taylor disclose an automatic gate for permitting or preventing access by a person to a space or a transport vehicle, in particular to a boarding lounge or an aeroplane (p. 2, lines 20-23), comprising:

- At least one vertical and elongated frame [5,6] (side assemblies, Fig. 2, p. 2, line 23),
- At least one flap [31] (first member) which is mobile between a closed position in which this flap forms a barrier [2,3] preventing the passage of a person along the frame and an open position in which the flap allows this passage (Fig. 1-3, p. 2, lines 21-23),
- Elements for reading [4] an access ticket, in particular a ticket or an access card (p. 2, lines 21-23, p. 4, lines 27-28),

- Elements for controlling the displacement of the flap between the two abovementioned positions (p. 2, line 36),
- A lateral face of the frame adjacent to the passage of the person comprising at least two superposed rows of detection cells [11-26] cooperating with elements for preventing the opening of the flap or for maintaining the flap closed when these cells detect an abnormal situation (abnormal condition might consist of a detection of a person trying to pass through without having a valid ticket read also, Fig. 1, p. 2, lines 24-33, p. 4, lines 27-31),
- One of the rows, called high or upper row [13, 22], extending to both sides of the flap above a line situated at the mid-height of the frame and the other row called middle, being situated close to this line [11, 14-21, 24] (Fig. 1, p. 2, lines 24-33).

With respect to claim 2, Taylor disclose claim 1 above, and:

- A third row, called low [12, 23, 25-26], of at least one cell situated below line (Fig.1, p. 2, lines 24-33).

With respect to claim 5, Taylor disclose claim 1 and:

- The flap is integral with the frame (barrier [2] is part of frame and when closed rotates out to extend from the frame, Fig. 1).

With respect to claim 8, Taylor disclose claim 1, and:

- The elements for controlling the displacement of the flap are constituted by the reading of a valid ticket, allowing the displacement of the flap (p. 2, line 34- p. 3, line 4, and p. 4, line 27-28).

With respect to claim 9, Taylor disclose:

- The cells comprise at least three groups of cells, each of these groups being assigned to different detection functions (different groups of sensor represent different zones, p. 4, lines 3-5, detection group [11,13] detect tall/adult persons, group [11,12] detect short/child persons, p. 3, lines 11-12, lines 30-31, additional groups are [12, 26], [23, 25], and [25, 26] that insure passenger safety, p. 4, lines 12-16, collection zone, p. 5, lines 3-6).
- A first group of cells is assigned to a detection function ensuring the person's safety ([12, 26], [23, 25], and [25, 26], p. 4, lines 12-26), a second group of cells is assigned to a detection function in order to allow counting of the persons (new subject/tall person detecting group [11, 13] and short person detection [11, 12], p. 3, lines 9-15, 30-35) and a third group is assigned to a function of detection of non-authorized and/or fraudulent passages ([11, 13], new subject detection in conjunction with the lack of a valid ticket, p. 4, lines 25-26).
- At least one cell can belong simultaneously to two groups of cells in order to perform different functions depending on the group of cells to which the cell is assigned (sensor [11] belongs to the tall person detection group and the short person detection group, p. 3, lines 11-12, 30-31).

With respect to claim 17, Taylor disclose claim 1 above, and:

- The cells in the upper or middle rows, situated downstream of the flap are suitable for detecting the passage of a person or of a child from downstream to upstream of the gate and for controlling the closing of the flap in order to prevent the person from turning back. Taylor teaches allowing traffic in just one direction (unidirectional – Page 5 Line 17). Taylor also teaches leaving the gate open for people moving the correct direction and closing it when people approach the barrier improperly. Thus, Taylor implies the closing the gate when people move against the "unidirectional" flow of the traffic through the gate.

With respect to claim 23, Taylor disclose claim 1, and:

- The frame comprises a second flap mounted in pivoting fashion inside the frame, close to the first flap, on an axis shared with the latter, this flap projecting in the closed position, from the face of the frame opposite to that from which the first flap projects when it is in the closed position (barrier [2, 3], Fig. 1-2, p. 2, lines 21-24).

With respect to claim 24, Taylor disclose claim 1, and:

- The gate comprises a second frame parallel to the first and delimiting the passage [5, 6], the second frame comprises a second flap cooperating with the first flap (Fig. 2, p. 2, lines 20-24), the opening of the first and second flaps being controlled by the reading of a valid ticket and the

elements associated with the opening of the passage (p. 2, lines 21-26, p. 4, lines 27-28).

With respect to claim 25, Taylor disclose claim 1, and:

- A sound or visual signal associated with each normal or abnormal passage situation (visual signal, barriers open for normal passage and are closed in an abnormal situation, additionally, an alarm is activated when an invalid situation occurs, p. 4, lines 27-33).

With respect to claim 26, Taylor disclose claim 1, and:

- A symmetrical architecture suitable for allowing passage either in one direction, or in the opposite direction (Fig. 1-2, p. 5, lines 14-18).

With respect to claim 29, Taylor disclose claim 1, and:

- The middle row comprises at least six cells upstream of the flap ([11, 14-21], Fig. 1).

With respect to claim 33, Taylor disclose claim 2, and:

- The low row comprises a cell immediately downstream of the flap ([25], Fig. 1).

With respect to claim 34, Taylor disclose claim 2, and:

- The low row comprises two cells immediately upstream of the flap ([26, 12, 23], Fig. 1).

With respect to claim 36, Taylor disclose claim 1, and:

- Another flap arranged downstream of the flap, so that a high cell and/or a middle cell is located between the two flaps (Fig. 1, two flaps [7, 2], and detection cells of the middle row in between [14-21]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 27, 28, 30-32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor.

With respect to claims 27-28, 30-32, and 35, Taylor discloses claims 1, 29, and 33. Taylor also discloses an arrangement of sensor cells of high, middle, and low height rows for detecting people of different heights. And further, a number of cells in each row, and different positions and arrangement upstream and downstream of the movable flap, for sufficiently detecting different passenger situations that can occur in the passageway (Fig. 1, p. 2, lines 24-33, p. 3, lines 11-13, 19-21, 30-35, p. 4, lines 12-26, p. 5, lines 1-6).

Taylor fail to explicitly disclose {claim 27} the high row comprises at least six cells upstream of the flap; or {claim 28} the high row comprises at least six cells downstream of the flap; or {claim 30}, the middle row comprises at least three cells downstream of the flap; or {claim 31}, the middle row comprises at least six cells downstream of the flap; or {claim 32}, that each cell of the middle row is arranged under a cell of the high row; or {claim 35} that each cell of the low row is arranged under a cell of the middle row.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the abovementioned modifications to Taylor as an obvious design choice. It is clear that increasing the number of detector cells of course improves the quality of the functionality of the device, while at the same time increases the production cost. Given the large number of detection cells used in Taylor it is evident that any number of cells per row could be implemented in the design of the

frame such that the detection of the situations is still sufficiently intact. Exactly how many cells per row are build into the frame is a quality verses cost decision that each production company/designer must make. Subtraction or addition of a few detection cells used in the same device is not a unique feature that would set the device apart as patentably distinct from Taylor. The same remains true for whether each cell of a row is placed exactly under the cells of the row above it. This choice is the same quality-cost compromise that the designer makes, while exact alignment of the cells might ensure a better quality of reading a person's height, height can still be detected by staggering the cells, which allows the lateral position of the person to be still tracked while using less detector cells. Clearly, this choice does not make the slight variation claimed in the instant application patentably distinct from the device disclosed by Taylor.

6. Claims 3 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above, and further in view of Imazuka (Patent No.: US 6,450,404 B1).

7. With respect to claim 3, Taylor discloses claim 1 above, and at least one vertical and elongated frame [5,6] constituting a closed box (side assemblies, Fig. 1, Fig. 2, p. 2, line 23), the gate comprising, at least one flap [31] (first member) which is mobile between a closed position in which this flap forms a barrier [2,3] preventing the passage of a person along the frame and an open position in which the flap allows this passage (Fig. 1-3, p. 2, lines 21-23), the end upstream of the frame relative to the person's direction of movement, comprising an input slot for an access ticket and the downstream of the frame comprising an output slot for this ticket (p. 2, lines 21-23, p.

4, lines 27-28, Fig. 2, [4, 10]), the frame including elements for controlling the displacement of the flap between the two abovementioned positions (p. 2, lines 36), a route for displacement of the ticket between the input slot and the output slot [10] for the ticket and elements for reading the ticket [4] (p. 2, lines 21-23, p. 4, lines 27-28), characterized in that it comprises elements for preventing the person from accessing the output slot in order to remove the ticket (passenger must have passed the 'collection zone' for collecting the ticket from the output slot [10] before the next ticket will be output after being read, p. 5, lines 1-6).

Taylor fails to disclose that the ticket output is at the end of the downstream or that the positioning of the closed flap prevents a person from accessing the output slot of the ticket.

Imazuka teaches the output slot [4] for the ticket is at the end downstream of the frame, resulting that the flap is in the position preventing the passage of the person (Fig. 1, col. 2, lines 46-56).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Imazuka for the benefit of providing an additional safeguard against passengers taking someone else's access ticket. Taylor teaches implementing precautions against this (Taylor, p. 5, lines 1-9), and the further downstream ticket output positioning relative to the barrier shown in Imazuka is an additional precaution against this problem.

Taylor fails to disclose the distance between the ticket output and the barrier flap such that a person behind the barrier cannot access to remove a ticket.

Imazuka teaches the distance between the flap and the output of the ticket is such that when the flap is in the position preventing the passage of a person, the latter cannot access the ticket output in order to remove the ticket (Fig. 1, col. 2, lines 46-56).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Imazuka for the same reasons stated above.

8. With respect to claim 58, Taylor discloses at least one vertical and elongated frame [5,6] constituting a closed box (side assemblies, Fig. 1, Fig. 2, p. 2, line 23), the gate comprising, at least one flap [31] (first member) which is mobile between a closed position in which this flap forms a barrier [2,3] preventing the passage of a person along the frame and an open position in which the flap allows this passage (Fig. 1-3, p. 2, lines 21-23), the end upstream of the frame relative to the person's direction of movement, comprising an input slot for an access ticket and the downstream of the frame comprising an output slot for this ticket (p. 2, lines 21-23, p. 4, lines 27-28, Fig. 2, [4, 10]), the frame including elements for controlling the displacement of the flap between the two abovementioned positions (p. 2, lines 36), a route for displacement of the ticket between the input slot and the output slot [10] for the ticket and elements for reading the ticket [4] (p. 2, lines 21-23, p. 4, lines 27-28), characterized in that it comprises elements for preventing the person from accessing the output slot in order to remove the ticket (passenger must have passed the 'collection zone' for collecting the ticket from the output slot [10] before the next ticket will be output after being read, p. 5, lines 1-6).

Taylor fails to disclose that the ticket output is at the end of the downstream or that the positioning of the closed flap prevents a person from accessing the output slot of the ticket.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Imazuka for the benefit of providing an additional safeguard against passengers taking someone else's access ticket. Taylor teaches implementing precautions against this (Taylor, p. 5, lines 1-9), and the further downstream ticket output positioning relative to the barrier shown in Imazuka is an additional precaution against this problem.

Taylor fails to disclose the distance between the ticket output and the barrier flap such that a person behind the barrier cannot access to remove a ticket.

Imazuka teaches the distance between the flap and the output of the ticket is such that when the flap is in the position preventing the passage of a person, the latter cannot access the ticket output in order to remove the ticket (Fig. 1, col. 2, lines 46-56).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Imazuka for the same reasons stated above.

9. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above, and further in view of May (US Patent No.: 3,478,467).

With respect to claim 6, Taylor disclose claim 1 above.

Taylor fails to explicitly disclose that the flap is mounted in rotation about a horizontal axis, where the axis extends in the direction in the length of the frame.

May teaches the flap is mounted in rotation about an approximately horizontal axis extending in the direction of the length of the frame (Fig. 1, Fig. 2, Fig. 5, col. 2, lines 13-26)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with May because the barrier is more compact many other barrier types (May, col. 1, lines 24-72). Additionally, Taylor ventures to mention different types of barriers that can be used, or that employ different axis of rotation, and different shaft-pivotal planes, suggesting that this is merely a design choice (p. 5, lines 23-33).

With respect to claim 7, Taylor disclose claim 1 above.

Taylor fails to disclose a barrier having the shape of a sector of a circle with certain orientation.

May teaches that in the position preventing the passage of the person, the flap has a part projecting out of the frame having the shape of a sector of a circle, the

circular edge of this sector being directed upwards (Fig. 1, Fig. 2, elements [12, 13, 14], col. 2, lines 49-72).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with May for the reasons stated above.

Further, a variety of interchangeable barriers are disclosed again in both Taylor and May (May, Fig. 2, Fig. 4), and thus can also be consider an obvious design variation well within the ordinary skill in the art.

10. Claims 12, 37, 41, 42, and 46-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor and further in view of Tetherton (US Patent No.: 5,333,410).

With respect to claim 12, Taylor disclose claim 1 above, and:

The cells in the upper row comprised between the frame entry end and the flap are suitable for detecting the entry of an adult and optionally of two or more persons in close proximity (Fig. 1, "new subjects" are recognize when the tall/adult person sensors are triggered, in the top row, [13], p. 3, lines 9-14, and short/child person is detected when low sensors are triggered but not the tall sensor, p. 3, lines 30-33, also there is not a limit to how many persons might be detected passing through. Further, the system recognizes that if a child passes through, the doors do not close until the adult has followed along, p. 4, lines 17-20). The cells in the lower row comprised between the frame entry end and the flap are suitable for detecting the entry of a child (short human subjects, p. 3, lines 30-35). The cells situated close to the flap are assigned to the

safety of the person vis-a-vis the ill-timed closing of the flap (detectors [12, 26], and [23, 25] prevent the harm of gates closing on someone, p. 4, lines 12-20).

Taylor fails to explicitly disclose that the middle cells between the flap and exit are suitable for detecting the exit of a person.

Tetherton teach that the cells in the middle row comprised between the flap and the frame exit end are suitable for detecting the exit of a person after the opening of the flap (col. 7, lines 16-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Tetherton for the purposes of detecting fraud and stopping fraud and to protect the passing persons from being injured by the moving barriers (Tetherton, col. 7, lines 52-68).

Taylor fails to explicitly state that an adult pulling a trolley is detected by the detection pattern of an upper row cell covered and at least two lower row cells covered, separated by a cell that is not covered.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor such that the detection of an adult pulling a trolley is carried out by the combination of at least one covered cell in the upper row simultaneously with the covering of at least two covered cells in the lower row, separated by a non-covered cell. Taylor already discloses the need to recognize when a traveler is carrying luggage through the passageway (p. 3, lines 16-21). Since this device is typically used with persons who are traveling, it would be advantageous, and within the scope of a person having ordinary skill in the art, to program the device so

that a variety of luggage transport methods be recognized such as carrying, trolley-type, and rolling luggage so that the person can successfully make their way through the passageway with their luggage.

With respect to claim 37 Taylor, discloses the structural features from claims 1 and 2 above.

Taylor further teaches determining the presence of an adult by the simultaneous covering of a cell of the high row and a cell of the middle row superposed on the cell of the high row (adult/tall human subject, p. 3, lines 11-14). The presence of a child is determined by the covering of a cell of the middle row without a cell of the high row, superposed on the cell of the middle row being covered (p. 3, lines 30-35).

Taylor fail to disclose that fraud by crawling is detected by one cell covered in the low row.

Tetherton teaches that a fraud by crawling is determined when only one of the cells of the low row is covered (col. 7, lines 11-15, 21-26).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Tetherton for the benefit of detecting individuals trying to seek under the barrier without paying (Tetherton, col. 2, lines 53-55, col. 3, lines 12-15).

Taylor fails to disclose that fraud is detected when a certain number of cells of the same row are covered simultaneously.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to make a fraud/intrusion determination when a number of consecutive cells, in the same row covered simultaneously, is greater than a given number in order to detect situations where people are passing through the passageway in a normal way (because walking persons are generally vertically shaped), and therefore, could be trying to defraud the system by sneaking around the barriers.

With respect to claim 41, Taylor in view of Tetherton teaches claim 37 above, and Taylor further teaches:

- The entry of a person into the gate is determined when the most upstream middle cell [11], and most upstream high cell in the case of an adult [13], is covered at the same time (current person is detected, Fig. 1, p. 3, lines 11-12) as the following two cells are uncovered (collection zone detects the person ahead is moving downstream, p. 5, lines 1-7) and that then the cells of the following columns are successively covered (current person is walking through the collection zone) and that finally those of the two first columns are successively uncovered (the current person has moved through the collection zone, p. 5, lines 1-6, p. 3, lines 36-37).

With respect to claim 42, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- The gate comprises an almost ready state, allowing the advanced reading of an access ticket (successive tickets are read while the person in front is still traveling through the passage, p. 5, lines 1-7).

With respect to claim 46, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- When an intrusion and/or when a fraud is detected, if the flap or flaps are open, they receive a command to close (detection of an invalid situation results in the flaps closing, p. 4, lines 27-31).

With respect to claim 47, Taylor in view of Tetherton discloses claim 46, and Taylor further teaches:

- Following the intrusion, the flap or flaps are reopened only after a given time (p. 4, lines 31-34).

With respect to claim 48, Taylor in view of Tetherton disclose claim 37, and Taylor further teaches:

- When an intrusion or a fraud is detected, it is signaled by a sound signal and/or a light signal which signals that access to the gate is forbidden (p. 4, lines 27-33).

With respect to claim 49, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- An evacuation mode (always open condition), which can be activated locally, in which the gate is held open in order to allow free circulation (a crowd of people attempting can activate the barrier to the open condition

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by force, also, the gate can be electrically put into the always open condition, p. 6, lines 1-3, 15-20).

With respect to claim 50, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- A normally open mode in which the flap is open and unenergized and closes in case of intrusion and/or fraud (p. 5, lines 10-12, p. 4, lines 27-31).

With respect to claim 51, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- A normally closed mode in which the flap is closed and unenergized and opens in case of authorized passage (p. 5, lines 12-14).

With respect to claim 52, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- A zone of cells to both sides of the flap allows validation of their clearing by a person (approach his recognized by [11,13], p. 3, lines 10-14, and system recognized passenger clearing the "collection zone" [11-16] after passing by the barrier, after clearing occurs, the next passenger can collect their ticket and pass though, p. 5, lines 1-6).

With respect to claim 53, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- A zone of cells for counting is composed of three successive columns of cells, each column of cell being successively covered then successively

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uncovered before validation of a passage (passenger is validated by several columns of cells, approach his recognized by [11,13], p. 3, lines 10-14, and system recognized passenger clearing the "collection zone" [11-16] after passing by the barrier, p. 5, lines 1-6, also, bottom cells [12, 26] and [23,25] need to be cleared before the barrier will close behind the passage, p. 4, lines 12-16).

With respect to claim 54, Taylor in view of Tetherton discloses claim 37, and Taylor further teaches:

- A delay time exists which is engaged after at least certain of the clearing stages of the gate, an anomaly being detected if a following clearing stage of the gate has not occurred during this delay time (p. 4, lines 33-34, p. 5, lines 1-9).

With respect to claim 55, Taylor in view of Tetherton disclose claim 54, and Taylor further teaches:

- A delay time exists for the entry of a person into the gate after authorization has been given to him (the passenger's ticket can be ready, but a time delay exists so that the person ahead can first clear the collection zone before outputting the next ticket for collection, p. 5, lines 1-9).

With respect to claim 56, Taylor in view of Tetherton discloses claim 54, and Taylor further teaches:

- A delay time exists for clearing the flap(s) by an authorized person after he has entered into the gate entry zone (after a person enters the zone and has inserted ticket there is a delay, for returning a ticket so that the person can clear flaps, which serves as a precaution against the person ahead from taking a ticket that doesn't belong to them, p. 5, lines 1-9).

With respect to claim 57, Taylor in view of Tetherton discloses claim 54, and Taylor further teaches:

- A delay time exists for a person to leave the exit zone, after having cleared the flaps (there is a delay for the person to clear the zone as a prevention from stealing another's ticket, p. 5, lines 1-9).

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above, and further in view of Koczmar et al. (US Patent No.: 4,929,821) and Imazuka.

With respect to claim 18, Taylor disclose claim 1 above, and the frame contains a microcomputer (p. 2, lines 34-37), a reader (p. 2, lines 21-23) for the ticket introduced into the input slot [4] of the frame (p. 4, lines 27-28), cells for detection and in order to control (p. 2, lines 24-33), via an automaton and a frequency variator, the operation of an electric motor for displacing the flap towards the opening or closing positions (p. 2, lines 34-37).

Taylor fails to disclose an external central control station.

Imazuka disclose the controller of the automatic gate device is suitable for receiving information from an external central control station (Fig. 2, Fig. 5, col. 2, lines 59-67, col. 3, lines 1-2, col. 4, lines 23-35).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Imazuka because of the reasons already mentioned, and for the benefit keeping multiple access terminals and ticket issuing terminals in communication with each other such that processing of only a single ticket by the gate is necessary, changes can be made to the ticket easily, and it is easier to reissue tickets to passengers who have lost tickets (Imazuka, col. 1, line 14-col. 2, line 13).

Taylor fails to disclose that the reader can read the magnetic strip of the ticket no matter the input position.

Koczmar et al. teach the ticket has a magnetic strip (col. 7, lines 21-25), the frame comprising elements for reading this magnetic strip capable of reading the latter, whatever the position in which the ticket is introduced into the input (col. 8, lines 33-55).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Koczmar et al. because it improves the reading system such that when cards are frequently fed in incorrectly by mistake, they can still be read without having to reinsert the ticket, and therefore does not slow down the flow of traffic through the gate (Koczmar et al., col. 8, line 56- col. 9, line 6).

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above, and further in view of Sheldon (US Patent No.: 5,010,240).

With respect to claim 20, Taylor disclose claim 1 above.

Taylor fails to disclose cutting and detaching part of the ticket, where one part is taken by the person, and the other is stored.

Sheldon teach that close to the ticket output, a module for cutting the ticket and detaching from the latter a coupon intended to be taken by the person (col. 2, lines 5-11), and a store for recovering the remaining part of the ticket (col. 2, lines 23-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Sheldon in order to collect a record of passenger movements (col. 2, lines 10-13).

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as modified with Sheldon as applied to claim 20 above, and further in view of Koczmar et al.

With respect to claim 21, claim 20 is disclosed above.

Taylor as modified with Sheldon fail to teach a module for turning the ticket over.

Koczmar et al. teach that the frame comprises between the displacement route of the ticket and the module for cutting the ticket, a module for turning the latter over (col. 8, line 56- col.9, line 6).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combination of Taylor as modified by Sheldon because it allows the device to be more adaptive to the user input of the ticket and therefore can then read ticket which have not been inserted the "proper" direction (col. 8, lines 56-63).

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above, and further in view of Nelson (Patent No.: US 5,105,369).

With respect to claim 22, Taylor disclose claim 1 above.

Taylor fail to disclose a printer for printing a second different ticket, or that the printer is controlled by information received from an external control system.

Nelson teach a printer for printing a second ticket different from the ticket read by the reading elements [1470/1480] (col. 15, lines 10-17), this printer being controlled as a function of the data read by a reader and information received from an external control station (col. 15, line 39- col. 16, line 9, and col. 17, lines 47-57).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Nelson because changes can easily be made to the ticket (col. 15, lines 45-52) and can speed up the process of reservation, boarding, and control (col. 17, lines 54-57).

15. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor in view of Tetherton as applied to claim 37, and further in view of Tanabe (US Patent No.: 4,918,298).

With respect to claim 43-45, Taylor in view of Tetherton discloses claims 37 and 42 above. Taylor also discloses the use of time delays so that normal operation and flow of traffic can be returned to if an abnormal situation is encountered (p. 4, lines 33-34, p. 5, lines 1-9).

Taylor fails to disclose that if the gate is not ready, or been cleared after a given time, and an access ticket has been introduced via the ticket input slot, the authorization is cancelled and ticket is returned by the ticket input slot.

Tanabe et al. disclose returning a ticket via the input slot when an improper ticket is input (col. 2, lines 54-58).

It would have been to a person having ordinary skill in the art at the time the invention was made to modify Taylor with Tanabe et al. so that when flaps are not ready to open, the ticket can be returned to the person, to try a different gate, and the person can access the ticket easily by the input slot. Further, so that in the event that someone submits a ticket and has not tried to pass, the ticket and fare returned to the proper person so that others do not use the authorization.

Response to Arguments

Applicant's arguments filed 12/31/2007 have been fully considered but they are not persuasive.

Regarding the argument with respect to claim 1, that Taylor does not disclose a row of cells extending to both sides of the flap as recited, this argument is not found to

be persuasive. Sensors 13 and 22 are on both sides (right and left) of flap 2 in figure 2 of Taylor.

Regarding the argument with respect to claim 17, that Taylor does not disclose detecting people moving from downstream to upstream and closing the gate, this argument is not found to be persuasive. Claim 17 requires that the gate closes when the sensors detect a person trying to move downstream to upstream. Taylor teaches allowing traffic in just one direction (unidirectional – Page 5 Line 17). Taylor also teaches leaving the gate open for people moving the correct direction and closing it when people approach the barrier improperly. Thus, Taylor implies the closing the gate when people move against the "unidirectional" flow of the traffic through the gate.

Regarding the argument with respect to claim 23, that Taylor does not disclose 2 flaps that share a common axis, this argument is found not to be persuasive. The axis that runs from the right to the left through the flaps of Figure 1 of Taylor reads on the claimed axis. The claim states that the flaps are "on an axis" with each other, and the 2 flaps of figure 1 are both on said horizontal axis.

Regarding the argument with respect to claim 3, that Taylor in view of Imazuka does not teach the gate preventing access to the ticket take out slot, this argument is not found to be persuasive. Claim 3 requires only the structure that prevents someone from reaching the ticket take out slot when the gate is closed, and does not claim the operation of said gate. Imazuka teaches a ticket take out slot (4) as being inaccessible when flap (7) is closed (Fig. 1), and thus meets the claim limitations.

Regarding claim 12, applicant points out that no art was applied against claim 12, however claim 12 was rejected in the 102 rejections section of the office action.

Regarding the argument that the prior art does not teach at least three groups of cells assigned to detection functions ensuring the person's safety (Page 4 Line 12), the counting of the persons (Counting is being interpreted as recognizing - Page 3 Line 11), and non-authorized and/or fraudulent passage (Page 4 Line 27), this argument is not found to be persuasive. Taylor teaches all three of these features at the locations specified.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAFFERTY KELLY whose telephone number is (571)270-5031. The examiner can normally be reached on Mon. - Fri. 800-1730 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. K./
Examiner, Art Unit 2876
5/21/2008

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876